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                  IN THE UNITED STATES DISTRICT COURT
                  FOR THE EASTERN DISTRICT OF VIRGINIA
 2
                            Norfolk Division
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        CENTRIPETAL NETWORKS, INC.,
 5
                                               CIVIL ACTION NO.
               Plaintiff,
 6
                                                     2:18cv94
       V.
 7
       CISCO SYSTEMS, INC.,
 8
               Defendant.
 9
10
11
         TRANSCRIPT OF VIDEOCONFERENCE BENCH TRIAL PROCEEDINGS
12
                           Norfolk, Virginia
13
                               May 7, 2020
14
                                Volume 2B
                              Pages 250-324
15
16
     BEFORE: THE HONORABLE HENRY COKE MORGAN, JR.
              United States District Judge
17
18
     APPEARANCES:
19
20
               KRAMER LEVIN NAFTALIS & FRANKEL LLP
               By: Paul J. Andre
2.1
                    Counsel for the Plaintiff
22
               DAVIS POLK & WARDWELL LLP
               By: Neil H. MacBride
                          - and -
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               DUANE MORRIS LLP
24
               By: Matthew C. Gaudet
                    Counsel for the Defendant
25
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Carol L. Naughton, Official Court Reporter

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Carol L. Naughton, Official Court Reporter

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-Rogers, S. - Direct-
              (Proceedings resumed at 2:08 p.m.)
 1
 2
              THE COURT: All right, Mr. Andre. You may resume
 3
     your examination of Mr. Rogers.
              MR. ANDRE: Thank you, Your Honor.
 4
 5
                     DIRECT EXAMINATION (Resumed)
 6
     BY MR. ANDRE:
 7
     Q. Mr. Rogers, when we left off, we were on PTX-231, and I
 8
     just had highlighted the second bullet point, talking about
 9
     threat intelligence.
10
              Could you explain to the Court what is threat
11
     intelligence and how does Centripetal use it?
12
     A. Well, threat intelligence is the knowledge of who the bad
13
     guys are, where they're coming from, what infrastructure they
14
     use, what servers they might attack you from, what locations
15
     they might want to send information that they've stolen from
16
     your network to.
17
              So it's a pretty big area. There's lots of
18
     companies now who develop this threat intelligence, find out
19
     these things, and publish their list.
20
     Q. And it's safe to say on this document you have over 90
2.1
     integrated threat intelligence providers. Who are some of
22
     those providers?
2.3
     A. Well, Jonathan in our company manages those providers,
24
     but the typical one would be IBM or web route companies like
25
     that.
```

- 1 | Q. So you pay these companies for this information?
- 2 A. Yes, and we also have other providers. We have -- there
- 3 | are groups that do this. The U.S. government provides threat
- 4 feeds. Industry organizations from a group of banks provide
- 5 | a threat feed for threat intelligence actors who might attack
- 6 banks and financial institutions, yes.
- 7 THE COURT: I'm back to where we were at the
- 8 beginning audio-wise. I don't know what you did, Mr. Rogers,
- 9 but I could hear you a lot better before than I can now. I
- 10 | don't know what the reason is.
- 11 THE WITNESS: Okay. I'm going to turn up my audio.
- 12 THE COURT: Okay.
- 13 THE WITNESS: Hopefully, that will be better for
- 14 you. And I will also attempt to speak up.
- 15 THE COURT: Well, I can hear you fine now.
- 16 THE WITNESS: Okay, good.
- 17 THE COURT: All right. You may continue, Mr. Andre.
- MR. ANDRE: Thank you, Your Honor.
- 19 BY MR. ANDRE:
- 20 Q. So is threat intelligence -- is that an important aspect
- 21 of how Centripetal's technology works?
- 22 A. Yes. The threat intelligence is what we use to make the
- 23 discrimination as to whether you should allow or not allow or
- 24 | who is bad, is impinging on your network.
- 25 Q. And you can take down that document.

- 1 How is Centripetal's technology different or better
- 2 | than what was out there in 2009, when you first got into this
- 3 business?
- 4 A. Well, in 2009, again, the whole idea was to look at
- 5 | "what." So the -- you would look at signatures, things like
- 6 | that, of files that were already traversing your network.
- 7 Q. Does Centripetal patent its inventions in this space?
- 8 A. Yes.
- 9 Q. And why do you do that?
- 10 A. Well, because in order to make our product successful and
- 11 to protect the interests of our venture capital investors and
- 12 others, we had to file for protection of our ideas;
- 13 otherwise, they could just be copied.
- 14 Q. And you mentioned your venture capital investors. Have
- 15 | you received significant investment in your company?
- 16 A. Yes.
- 17 Q. You mentioned that when you started the company, you
- 18 | started by yourself in the basement. How many employees do
- 19 | you have now?
- 20 A. We've got between 50 and 100.
- 21 Q. And have you received any awards for your technology and
- 22 | your products in the market?
- 23 A. Yes, we have.
- 24 Q. We have a slide here. Could you describe just a couple
- 25 of these awards?

-Rogers, S. - Direct-

A. Sure. For instance, Gartner has an award for new emerging companies called the "Cool Vendor." Gartner typically only follows large, established companies, but they gave us a Cool Vendor Award in 2017. They only do that once in your lifetime, and they'll do it for maybe four or five companies a year, three companies a year, that kind of thing.

We also received a Signet 16. Signet is an organization that has a board composed of CSOs from major companies and government agencies, and they get together and look at the new technologies, and they awarded us a Signet 16 Innovators Award.

We were a FinXTech Labs Award. That's a group of banks in New York City. And we've also been noted by many others. I can keep going, if you'd like.

Q. That's unnecessary. Let's talk about some of your customers.

Who are some of the customers, just a representative customer that you've been able to place your products with?

A. Well, our customers include a range of customers who are the very largest representative customers that are out there, all the way down to very small ones.

So we have customers like the Department of Homeland Security, who is an early adopter of our technology, Home Shopping Network, QVC, the NASDAQ bought our systems. So customers like that are at the top end.

- But on the bottom end, we have small companies.
- 2 | Brethren Mutual is an insurance company that does 100 million
- 3 | a year in revenue. New England Die Company is a small
- 4 defense contractor but very critical in what they do. And so
- 5 | we can protect the smallest to the largest and do it cost
- 6 effectively for them.
- 7 O. You can take that slide down.
- 8 Now, in 2015, do you recall a meeting you had with
- 9 Pavan Reddy of Cisco?
- 10 A. Yes, I sure do.
- 11 Q. First of all, who is Pavan Reddy?
- 12 A. Well, Pavan Reddy worked out of Research Triangle Park,
- and he was responsible for putting together special solutions
- 14 | for Cisco customers who needed to go beyond what products
- 15 | Cisco had.
- 16 Q. And could you describe your first encounter with
- 17 Mr. Reddy?
- 18 | A. Yes. I'll never forget it. He called me when I was on
- 19 | the train in New Jersey, going -- coming from visiting a
- 20 customer, and I had to get off the train at a train stop and
- 21 do the call, walking up and down the train platform.
- 22 Do you want me to go into any more detail about the
- 23 | call?
- 24 Q. Yes, please.
- 25 A. Okay, sorry. So anyhow, what I did was just describe to

- 1 | him what we did, how it worked, how effective it was, why it
- 2 | was so effective, that kind of thing, and Pavan told me that
- 3 he thought that it would fit into the types of solutions they
- 4 | needed for customers that were -- you know, that needed
- 5 | something that went beyond the offerings that Cisco had at
- 6 the time.
- 7 Q. And did you have follow-up meetings with Mr. Reddy or his
- 8 representatives in 2015?
- 9 A. Yes, we did. We ended up having a demo for them. We
- 10 | showed them our whole system and all the pieces and explained
- 11 to him why it was effective. We did that for not just him
- 12 | but for other members of his team, as well.
- 13 Q. And do you recall in 2016 after -- you meeting with the
- 14 | corporate development team at Cisco?
- 15 A. That's correct.
- 16 Q. And did you sign a nondisclosure agreement before you had
- 17 | those meetings?
- 18 A. Yes, we did.
- 19 Q. Now in the meetings with Mr. Reddy in 2015, there was no
- 20 nondisclosure agreement. Is that correct?
- 21 A. That's correct.
- 22 Q. And did you only show him at that point mostly
- 23 public-facing information, nonconfidential?
- MR. MacBRIDE: Objection, Your Honor; leading.
- MR. ANDRE: Wait. There's an objection, Mr. Rogers.

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-Rogers, S. - Direct-
 1
     I'm sorry.
 2
              THE COURT: Yeah, I heard.
 3
              It was a leading question. I think you can rephrase
 4
     the question.
 5
              MR. ANDRE: Sure.
 6
     BY MR. ANDRE:
 7
     Q. Did you have a nondisclosure agreement in place when you
 8
     had your meetings with Mr. Reddy?
 9
     A. No, we did not.
10
       And did you disclose any confidential information to
11
    Mr. Reddy in 2015?
12
    Α.
        No.
13
     Q. Do you recall when you did get a nondisclosure agreement
14
     in place with Cisco?
15
              MR. MacBRIDE: Objection.
16
              THE WITNESS: It was -- am I allowed to answer?
17
              THE COURT: Overruled. Go ahead.
18
              THE WITNESS: Okay. So it would have been early in
19
     2016.
20
     BY MR. ANDRE:
21
     Q. And was there a meeting -- do you recall a meeting with
22
     Cisco in 2016, after you signed the nondisclosure agreement?
2.3
     A. Yes. We had a Webex meeting with people at Cisco from --
24
     they gathered together people from all over their cyber
25
     security product line, all over the world.
```

- 1 | Q. And what does it mean to you at Centripetal when you sign
- 2 | a nondisclosure agreement?
- 3 A. It means that they will not disclose the things that we
- 4 discuss beyond the meeting, beyond the participants.
- 5 Q. I want to show you what's been marked as PTX-547.
- Do you recognize the document that's on the screen,
- 7 Mr. Rogers?
- 8 A. Yes, I do.
- 9 Q. And what is this document?
- 10 A. I believe it's the presentation that we provided to
- 11 Cisco.
- 12 Q. Who led the discussion for Centripetal in this meeting
- 13 | with Cisco?
- 14 A. Jonathan did, Jonathan Rogers.
- 15 Q. And is he related to you?
- 16 A. Yes. He's my son.
- 17 Q. And if you turn --
- 18 MR. ANDRE: Your Honor, I'd like to move Exhibit
- 19 PTX-547 into evidence.
- THE COURT: PTX-547 will be admitted.
- MR. ANDRE: Thank you, Your Honor.
- 22 (Plaintiff's Exhibit PTX-547 received in evidence.)
- 23 BY MR. ANDRE:
- Q. If you turn to Page 6 of this document, there's a slide
- 25 | entitled "Threat Intelligence." Do you see that?

- 1 A. Yes, I do.
- 2 | Q. Did you inform the people at Cisco how Centripetal uses
- 3 threat intelligence in its solutions?
- 4 A. Yes, we did.
- 5 Q. And if you turn to the next page, Page 7, there's a slide
- 6 there that says, "Speed and Scale."
- 7 The first bullet point says, "Centripetal's patented
- 8 | filter algorithms eliminate the speed and scalability
- 9 | problem." Do you see that?
- 10 A. I do.
- 11 Q. Did you tell the people at Cisco about your patented
- 12 | filter algorithms?
- 13 A. Well, I didn't. Jonathan did, of course.
- 14 Yes, we did. We talked about the filter algorithms
- and all of the other pieces that required speed and scale of
- 16 | the solution.
- 17 | Q. And you mentioned that your solutions were patented?
- 18 A. Yes, of course.
- 19 Q. You can take that slide down.
- 20 Mr. Rogers --
- 21 THE COURT: Well, it talks about how many documents
- 22 | you can pass through your system, which seems to be one of
- 23 | the issues, and it says, "1/0 of 30 million packets per
- 24 | second." What does that mean?
- MR. ANDRE: Could you put the document back up?

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-Rogers, S. - Direct-
     Thank you.
 1
 2
              THE WITNESS: So when you're operating at a very
     high network speed -- some of our customers operate all the
 3
 4
     way up to 100 gigabits now, or certainly beyond 10 gigabits
 5
     of full line grade. That's bits per second that flow through
 6
     the interface, and that's because they have so many customers
 7
     who are coming at their system with such a volume of traffic.
     Okay. That ends up being broken up into packets, and that's
 8
 9
     a lot of packets per second.
10
              And so 30 million packets per second, each packet
11
     having, maybe, 1,000 bits or more, 10,000 bits, that's the
12
     speed at which we had to be able to handle these packets,
13
     send them through the system, and not delay the packet.
14
     Because if you delay the packet, then you'll slow down the
15
     experience, and people won't want to come to your web page
16
     anymore.
17
              THE COURT: Well, you say that's the speed at which
18
     we did it.
19
              THE WITNESS: Yes.
20
              THE COURT: Which you're saying is 30 million
21
     packets per second?
22
              THE WITNESS: Yes.
23
              THE COURT: All right. Now, is that considered
24
     average or fast or slow?
25
              THE WITNESS: It's super fast for what we were
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-Rogers, S. - Directdoing, because we had to take each packet and examine it and find and compare it against millions of threat indicators, and we had to make each of those comparisons and then be finished with that in time for the next packet to come. If you can't do it within a single packet time, then you'll end up having a queue develop, which will then eventually result in packet loss. THE COURT: A queue? You mean a line, like waiting in line? Is that what you mean? THE WITNESS: That's right. It would be like waiting in line, but the line is only so long, so if you don't take people out of the line fast enough, the line will overflow, and they'll have to send people away. THE COURT: Well, the number of packets that go through your system for various customers, does that vary with the size of the customer or --THE WITNESS: Yeah, that's right; it typically does. I would find that for ranging all the way from a small business, it might be 100 megabits per second, all the way up to our largest customers, some of which are now going faster than the 30 million packets per second. THE COURT: So you can speed up the system if there are more packets to deal with? Is that what you're saying? THE WITNESS: That's right. We're working on that all the time. We've got one in the lab that goes 10 times

- 1 | faster than our fastest that we have today.
- THE COURT: All right.
- 3 BY MR. ANDRE:
- 4 Q. And the first part of that line says, "I/O." What does
- 5 | that stand for?
- 6 A. Input/output. It means that the packet goes both
- 7 directions. You have to look at both sides, because you
- 8 | could be receiving packets from a bad threat actor, or you
- 9 | could be sending packets to a bad threat actor. It goes both
- 10 ways. You have to look at both at the same time.
- 11 Q. You're examining packets going in and out of the system?
- 12 A. That's correct.
- 13 Q. And you could do that back at the time of this meeting at
- 14 | 30 million packets per second?
- 15 A. Yes, and we regularly gave demos of that capability, just
- 16 | so there would be no doubt.
- 17 | Q. When it says, "filter against 5 million complex IOCs" --
- 18 | first of all, what is an IOC?
- 19 A. Well, in the trade we call it an indicator of compromise.
- 20 | So if your network has traffic going out of it, let's say,
- 21 and that traffic is going to a place in Romania that we know
- 22 | is hosted by criminals, cyber criminals, that's an indicator
- 23 that you've been compromised.
- So that's the lingo that we use in the industry to
- 25 talk about these things.

- 1 Q. Thank you. You can take that document down.
- 2 And all this information you discussed with Cisco in
- 3 | the February 2016 meeting?
- 4 A. Yes.
- 5 Q. Mr. Rogers, how has having to compete against your own
- 6 | technology in the marketplace affected your business?
- 7 A. Well, it's impossible to compete against your own
- 8 | technology if you have, you know, a large incumbent, a
- 9 competitor. That competitor has already sold into virtually
- 10 every customer you would go to.
- 11 You tell them about your wonderful new technology
- 12 | that can help them, and, you know, they'll talk to their
- incumbent and say, "What do you think about this?" The
- 14 incumbent just says, "Well, we do the same thing. And that
- other company is pretty small, too, and so it's a risk for
- 16 | you, " and it kills your business. It's devastating to your
- 17 business. It makes it really hard.
- 18 Q. Thank you, Mr. Rogers.
- MR. ANDRE: Your Honor, I have no further questions.
- 20 THE COURT: All right. Does defendant wish to
- 21 cross-examine?
- 22 CROSS-EXAMINATION
- 23 BY MR. MacBRIDE:
- 24 | Q. Good afternoon. Neil MacBride, for Cisco Systems.
- MR. MacBRIDE: Can the Court and counsel and the

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-Rogers, S. - Cross-
     witness hear me?
 1
 2
              THE COURT: Not very well.
 3
              THE WITNESS: I can.
              MR. MacBRIDE: Your Honor, I'll keep my voice up.
 4
 5
     Is that better?
 6
              THE COURT: Yes.
 7
              MR. ANDRE: And, Your Honor, this is Mr. Andre.
     we ask that the defendants e-mail the cross-examination
 8
 9
     exhibits, if there are any, at this point?
10
              MR. MacBRIDE: Yes, Mr. Andre. Thank you for
11
     sending yours over this morning. They came a bit late, but
12
     we'll send ours right now. In fact, they may have already
1.3
     been sent.
14
              MR. ANDRE: Thank you.
15
              MR. MacBRIDE: Confirming they've been sent.
16
              THE COURT: You're going to send it to me, as well?
17
              MR. MacBRIDE: Your Honor, I believe it should have
18
     been in your binder, delivered this morning. It's a two-page
19
     document.
20
              (There was a pause in the proceedings.)
21
              THE CLERK: Do you know where the summary documents
22
     are for Cisco? Centripetal brought the summaries over this
2.3
     morning, but the Judge had asked for a summary for each
24
     witness. That's what he's looking for at the moment.
25
              THE COURT: I've got all the exhibits, but I don't
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-Rogers, S. - Cross-
     have the summary of the outline of the areas of
 1
     cross-examination, is what I don't have. I guess the
 2
 3
     document that was just e-mailed to Mr. Andre -- I don't have
 4
     it.
              Have we got it? Have you got it?
 6
              THE CLERK: No, sir, I don't have it.
 7
              MR. NOONA: I don't see it, either. This is Steve
 8
     Noona.
 9
              MR. MacBRIDE: Your Honor, my understanding is that
10
     we e-mailed it to Ms. Stacie Countess, at the court, this
11
    morning.
12
              THE CLERK: She's not available at the moment, so,
13
     Mr. Noona, can you forward that to me, please?
14
              MR. NOONA: Mr. Noona here. I don't have of it.
15
     I'm looking for it right now myself.
16
              THE CLERK: If someone can forward it to me, instead
17
     of -- Ms. Countess is off today.
18
              MR. MacBRIDE: Mr. Carr, our local counsel, I can
19
     have him send it over again right now.
20
              THE CLERK: Thank you.
2.1
              MR. MacBRIDE: My apologies that it has not arrived.
22
              (There was a pause in the proceedings.)
2.3
              MR. MacBRIDE: Ms. Baxter, we're forwarding that
24
     document to you now.
25
              THE CLERK: Thank you. I'll let you know as soon as
```

- 1 | I get it.
- 2 MR. MacBRIDE: My apologies, Your Honor and
- 3 Ms. Baxter, for the inconvenience.
- 4 THE COURT: I don't know -- Stacie has the day off.
- 5 I don't know if she has it or not, but I don't have it in my
- 6 book. That's all I know.
- 7 You can go ahead and proceed, Mr. MacBride.
- 8 MR. MacBRIDE: All right, Your Honor, I will
- 9 | proceed. And, again, my apologies to the Court and
- 10 Ms. Baxter. Hopefully, opposing counsel has received the
- 11 document at this point.
- 12 BY MR. MacBRIDE:
- 13 Q. Good afternoon, Mr. Rogers.
- 14 A. Good afternoon.
- 15 Q. Mr. Rogers, we've not met before, at least to my
- 16 | recollection, so it's nice to meet you. I'll be asking you
- 17 | some questions this afternoon, and I just want to make sure,
- 18 | again, that you can hear me okay.
- 19 A. Just fine.
- 20 Q. Great. So if at any point you can't -- I've got spring
- 21 | allergies, so if for any reason you can't hear me, just ask
- 22 | me, and I'll be happy to speak up or reask my question.
- So, Mr. Rogers, if I may, I'd like to start by
- 24 | clarifying a couple of things that your lawyer, Mr. Andre,
- 25 asked you on direct examination.

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-Rogers, S. - Cross-

And, in particular, I wanted to ask you about RuleGATE, Centripetal's product, and how it was introduced to the market when it -- in recent years. And I just want to make sure I'm correct that the way your company described RuleGATE to the market was in terms of "Packet filters located at network security boundaries need to be able to enforce highly dynamic security policies with millions of rules but without impacting network performance and user quality of experience." Is that how RuleGATE was described to the community? Yeah, that's part of it. And to clarify, did you also tell the market that RuleGATE packet filters from Centripetal networks meet these performance specifications, the ones I just alluded to? A. Well, there's a time continuum here, so we did different -- we had initial capabilities, and then we added

different -- we had initial capabilities, and then we added to those capabilities, and then we added to those capabilities, and so on, across a period of time.

So what time are you talking about here? Why don't we turn to Plaintiff's Exhibit 1591, which was a document your lawyer, Mr. Andre, previously asked you about. If we could turn to Page 2 of this document --

MR. MacBRIDE: Your Honor, again, this is Plaintiff's Exhibit 1591, previously moved into evidence.

THE COURT: This is one of the plaintiff's exhibits?

MR. MacBRIDE: That's correct, Your Honor, and I'm on the second page, Page 2, of a five-page document, and the Bates number ending in 228.

THE COURT: Okay.

BY MR. MacBRIDE:

1

2

3

4

- Q. And so I will ask Mr. Simon to go to the first paragraph entitled "Summary," and, starting about midway down, if you
- 8 could, please, highlight, Mr. Simon, the sentence starting
- 9 "Packet filters..." and if you could highlight that sentence
- 10 and the next sentence at this point, please.
- Mr. Rogers, again, am I correct that you
- 12 described -- your company described to the industry --
- 13 | RuleGATE this way?
- 14 A. Let's see. First of all, we talk about what a solution
- 15 | would look at, so that's the sentence on packet filters.
- And then we spoke about -- in the second sentence,
- 17 we said that the RuleGATE packet filter would meet that
- 18 performance specification.
- 19 Q. Right. So this is how you described your technology to
- 20 the industry.
- 21 A. Well, it's a basic piece of the whole system, yes. It's
- 22 | how we would describe this piece of it.
- 23 Q. Well, isn't it true, Mr. Rogers, that after you describe
- 24 | packet filters in these two sentences, the next thing you
- 25 | told the market is that your product RuleGATE is "readily

- 1 | combined with conventional defenses to accelerate existing
- 2 | cyber security infrastructure"?
- 3 A. What's your question?
- 4 Q. Do you agree that when you put out this document to
- 5 | industry, you described your product RuleGATE as being
- 6 | "readily combined with conventional defenses," conventional
- 7 | cyber security defenses, "to accelerate existing cyber
- 8 | security infrastructure"?
- 9 A. Yeah, because the existing infrastructure wasn't getting
- 10 | the job done, and so we designed our system in such a way
- 11 | that you could leave the existing infrastructure in place and
- 12 just add what we did.
- 13 Q. So you told industry that your product could be combined
- 14 | with security that was already being done, conventional
- 15 | security, correct?
- 16 A. Well, most of the customers didn't want to take anything
- 17 out, so, yes, we would leave what you got there and put this
- 18 | new system in, along with the things you already had.
- 19 Q. And, Mr. Rogers, when you put this information out to
- 20 | industry, your company gave some examples of conventional
- 21 cyber defenses, right?
- 22 A. We may have. I don't know.
- 23 Q. Well, if I could direct your attention to the first
- 24 | sentence and ask Mr. Simon to highlight that at the top
- 25 there.

- 1 A. Yes, of course. Okay. I see what you're saying.
- 2 | Q. All right. So Centripetal recognized, for example, that
- 3 | it was totally conventional to have things like network
- 4 | firewalls, correct?
- 5 A. Yes.
- 6 Q. And you agree you told potential customers that it was
- 7 | conventional for clients to use -- to have cyber defenses in
- 8 | their routers, correct?
- 9 A. Some do. Some had boards that would plug into their
- 10 | routers that would be firewalls, sure.
- 11 Q. Right. And Centripetal -- you didn't invent any of these
- 12 | conventional cyber defenses, correct?
- 13 A. Invent the defenses that were failing? No, we didn't
- 14 invent those.
- 15 Q. And Centripetal didn't invent packet filtering, either,
- 16 | correct?
- 17 | A. The idea of packet filtering we did not invent, but we
- 18 | did invent the filtering systems that we created.
- 19 Q. Packet filtering was around long before Centripetal was
- 20 founded, true?
- 21 A. Well, it depends on what you mean by packet filtering.
- 22 | What were you filtering on, what types of things? Were you
- 23 | just looking to see if there was an address that you could
- 24 | move a packet through a router on or not?
- 25 Packet filtering covers a huge range of possible

- 1 | things you might do, most of which have nothing to do with
- 2 cyber security.
- 3 Q. Centripetal did not invent the concept of packet
- 4 | filtering in cyber security, true?
- 5 A. Let's see. No, I'm not -- I don't agree with that. It
- 6 depends on what kind. You can't just make such a broad
- 7 statement in filtering.
- 8 Q. Is it true, Mr. Rogers, that this presentation very
- 9 | clearly told potential customers that your product RuleGATE
- 10 | could be combined with conventional defenses, conventional
- 11 security defenses, cyber security?
- 12 A. It did not have to remove -- we wanted to make the point
- 13 | that it didn't have to remove what they already had.
- Many of the banks and others that we were talking to
- 15 at the time had these things in. They were required to have
- 16 | a firewall, a web proxy, and an IPS. They were required to
- 17 | have it. So we couldn't go in and say, "Well, you know, if
- 18 | you put our system in, you don't need these things." So we
- 19 | worked in conjunction with them.
- 20 Q. Mr. Rogers, let me try and put it to you this way:
- 21 The lines that you see in the exhibit that are
- 22 | highlighted that I've asked you about, those are all still
- 23 | correct, right? You're not backing away from any of those
- 24 statements?
- 25 A. No. We've made those statements. I'm not backing away

- 1 from them.
- 2 Q. All right. Let's shift gears, Mr. Rogers.
- 3 You told your counsel that you're the CEO and
- 4 | founder of Centripetal Networks?
- 5 A. Yes.
- 6 Q. You founded the company?
- 7 A. Yes.
- 8 Q. And would you agree that as the CEO, you have the
- 9 ultimate responsibility for any actions your company takes?
- 10 A. I do, you know, but I have a team, and I'm a good
- 11 delegator. I don't make every decision. So I don't do that.
- 12 Q. And, in fact, you delegated the responsibility of
- 13 | managing this lawsuit against Cisco to your son, Jonathan
- 14 Rogers; is that right?
- 15 | A. I did.
- 16 Q. And your view, your recollection, is that Jonathan is the
- 17 one who came up with the idea for this lawsuit, correct?
- 18 | THE COURT: The idea of what? I didn't get that.
- 19 | The lawsuit?
- MR. MacBRIDE: Your Honor, I asked Mr. Rogers
- 21 | whether he agreed that his view was that his son Jonathan is
- 22 | the individual who probably came up with the idea to sue
- 23 Cisco.
- 24 THE WITNESS: I think we all realized that if there
- 25 | was copying going on of our technology, we would need to

- 1 | enforce that in some way. So I don't know whose idea it was.
- 2 BY MR. MacBRIDE:
- 3 Q. Do you recall testifying at your deposition, Mr. Rogers,
- 4 | that it was probably Jonathan who came up with that idea?
- 5 A. Well, yeah, probably, but I can't say for sure. It was a
- 6 discussion that was ongoing among the team members, so...
- 7 Q. Mr. Rogers, let's shift gears a little bit and talk about
- 8 | NetFlow, a concept that's already been introduced to the
- 9 Court.
- And just to clarify, you agree that Centripetal has
- 11 never developed a security product based on NetFlow, correct?
- 12 A. Not really, no. We built a product that could integrate
- 13 | with NetFlow, if you wanted it to, but, no, I don't think we
- 14 | specifically went out there and said, "Let's integrate with
- 15 | NetFlow."
- 16 Q. My question is: You agree that Centripetal -- I'm not
- 17 | asking about integration.
- 18 My question is: Your company never invented a
- 19 | security product based on NetFlow; is that right?
- 20 A. NetFlow preexisted our product.
- 21 Q. Let me try again.
- 22 Do you agree -- do you remember testifying in
- 23 December, at which time you said your company had never
- 24 developed a security product based on NetFlow? Do you agree?
- 25 A. No, I don't agree, because NetFlow is just a protocol,

```
-Rogers, S. - Cross-
     and so there's no reason why we couldn't absorb that protocol
 1
 2
     and use it if it was useful to do so, so I don't agree.
        I believe you may have testified differently in the past,
 3
 4
     Mr. Rogers. If we could please turn to your December 2019
 5
     deposition, at Page 216.
 6
              MR. MacBRIDE: Your Honor, this should be in your
 7
     binder of your cross-examination materials.
 8
              THE COURT: Okay. I have a deposition that was
 9
     taken on December 18th --
10
              MR. MacBRIDE: Correct.
11
              THE COURT: -- is what it says on mine.
12
              MR. MacBRIDE: Yes, that's correct, Your Honor.
                                                                Ιt
13
     is Mr. Rogers' deposition from December 18, 2019.
14
              THE COURT: What page?
15
              MR. MacBRIDE: Page 216, and lines 13 to 18.
16
              THE COURT: Wait a minute. Page what, now?
17
              THE CLERK:
                          216.
18
              THE COURT: What?
19
              THE CLERK:
                          216.
20
              THE COURT: Well, okay. The Court's rule is that
21
     you read the question and the answer. We don't allow anybody
22
     to paraphrase what he said. We just allow whatever question
2.3
     and answer that you think is inconsistent with his testimony,
24
     you just read it.
25
              So we're on line 13 of Page 216?
```

```
-Rogers, S. - Cross-
              MR. MacBRIDE: That's correct, Your Honor.
 1
 2
     BY THE CLERK:
 3
     Q. And, Mr. Rogers, this deposition was previously provided
 4
     to your counsel.
 5
              THE COURT: I've got it. I'm looking at it.
 6
              MR. MacBRIDE: Thank you.
 7
     BY MR. MacBRIDE:
     Q. So, Mr. Rogers, on December 18, 2019, I'm reading from
 8
 9
     the deposition:
10
              "QUESTION: To your knowledge, has Centripetal ever
11
     done any development work in developing a security product
12
     that's based on NetFlow?
1.3
              "ANSWER: No. We felt that threat intelligence
14
     would be a much better way to address cyber concerns. It's a
15
     different market."
16
              Sir, were you asked that question, and did you give
     that answer at your deposition?
17
18
     A. Well, I'm sure I did give it at my deposition. Thank you
19
     for putting this up for me.
20
              So what is your question?
2.1
     Q. You've answered it.
22
              And, Mr. Rogers, isn't it a fact that instead of
2.3
     using NetFlow, your company's product RuleGATE, instead,
24
     applies threat indicators to review packets? True?
25
     A. That's correct.
```

- 1 | Q. In fact, Centripetal's product applies millions of threat
- 2 | indicators to those packets at wire speed; is that right?
- 3 A. That's right.
- 4 | Q. And by "wire speed" you mean the technology that applies
- 5 | these millions of indicators to packets so fast, in real
- 6 | time, that a person sitting at their computer doesn't detect
- 7 | any delay; is that correct?
- 8 A. That's correct.
- 9 Q. But that's not what Cisco does, in your understanding.
- 10 | Don't you agree that, even today, Cisco's equipment cannot
- 11 apply millions of threat indicators at speed?
- 12 A. Well, our patents cover lots of different things besides
- 13 just the filtering algorithm. To be effective at what we do,
- 14 | to be really effective, you have to do it at wire speed, but
- 15 | that doesn't mean that you don't get some benefit from
- 16 copying us and doing it even at a lower speed.
- 17 Q. Mr. Rogers, I think you answered a different question, so
- 18 | let me try again.
- Do you recall testifying, sir, that, even today,
- 20 | Cisco's equipment cannot apply millions of threat indicators
- 21 | at wire speed?
- 22 | A. I haven't analyzed Cisco's equipment, so I don't know.
- 23 Q. I believe you may have testified differently in the past,
- 24 Mr. Rogers. If we could turn to Page 94 of your deposition.
- MR. MacBRIDE: Your Honor, this is the same exhibit,

```
-Rogers, S. - Cross-
 1
     of course, at Page 94 and at pages -- excuse me, at lines 8
 2
     through 13.
 3
              Your Honor, have you found the passage? May I
     proceed, Your Honor?
 4
 5
              THE COURT: Yes.
 6
              MR. MacBRIDE: Thank you.
 7
     BY MR. MacBRIDE:
 8
     Q. Mr. Rogers, again, for the record, I'm reading from your
 9
     December 18, 2019 deposition. You were asked the following
10
     question:
11
              "QUESTION: To your knowledge, Cisco's equipment
12
     isn't performing at this level, correct?
1.3
              "ANSWER: Not making any sort of decisions on threat
14
     intelligence, can a Cisco router run at a hundred gigabytes?
15
     Yeah, of course, but they can't make the security decisions
16
     at that speed."
17
              Mr. Rogers, were you asked that question, and did
18
     you give that answer at your deposition?
19
     A. I believe I was, yes. I think that's different than the
20
     question you just asked me, but yes.
2.1
        Mr. Rogers, let's move now and talk a little bit about
22
     your company's patents.
2.3
              In your view, isn't it correct that all of your
24
     company's patents concern the techniques that allow
     Centripetal to apply these millions of threat indicators at
25
```

- 1 | wire speed?
- 2 A. Is that a question?
- 3 Q. Have you agreed that all of your patents involve this --
- 4 | ultimately involve this technique that allows you to apply
- 5 | millions of threat indicators at speed?
- 6 THE COURT: At what?
- 7 THE WITNESS: All of the patents have to work
- 8 together. Your Honor, did you want to ask me something?
- 9 THE COURT: I heard the word "speed," but it just
- 10 | sounded like he said, "at speed," it didn't say what the
- 11 | speed was, or at least I didn't hear it.
- MR. GAUDET: Sure. Let me ask again.
- 13 BY MR. MacBRIDE:
- 14 Q. Mr. Rogers, do you remember testifying previously that
- 15 | all of Centripetal's patents concerned the technique that
- 16 | allows the application of millions of threat indicators at
- 17 | wire speed?
- 18 | A. I probably did testify to that, because our system needed
- 19 to operate at the speed to be maximally effective, but that
- 20 | doesn't mean that it has no effectiveness if it operated at a
- 21 lower speed.
- 22 | Q. Again, my question was you agree that all of your patents
- 23 | involve the concept of applying millions of threat indicators
- 24 at wire speed, correct?
- 25 | A. No, absolutely not. I don't agree with that.

```
-Rogers, S. - Cross-
        You don't -- you didn't previously testify that all of
 1
 2
     your patents involved this concept?
 3
     A. All of -- the entire system that's put together, using
     all of the patented technologies, are all designed to run at
 4
 5
     that speed, but it doesn't mean they have to. A patent on
 6
     correlation doesn't have to be relative to the speed of the
 7
     correlation.
     Q. Mr. Rogers, I believe you testified different previously,
 8
 9
     and so I would ask that Page 100 of your deposition --
10
              THE COURT: It's up to the jury to decide if he
11
     testified differently.
12
              MR. MacBRIDE: Understood, Your Honor.
13
              THE COURT: And I'm the jury.
14
              MR. MacBRIDE: Yes, Your Honor. I was simply laying
15
     a predicate to impeach, knowing the Court's rules.
16
     BY MR. MacBRIDE:
17
        So I'm at Page 100 of your December 18th, 2019
18
     deposition, lines 5 to 17.
19
              And, Mr. Rogers, I'm going to read the question and
20
     answer from your transcript that you were asked.
21
              Question by Mr. -- I'm sorry. My question was:
22
              "Which patents went to the original idea that was
23
     the genesis of the Centripetal advanced packet filtering
24
     algorithm techniques that led to the millions of rules of
```

performance level?"

```
-Rogers, S. - Cross-
              There was an objection by your lawyer.
 1
 2
              "ANSWER: My answer is all of them. If you wanted
 3
     to, you could probably look at the oldest ones and start with
 4
     the oldest ones, moving forward. The oldest ones gave us
 5
     something, and then there were more improvements, and more
 6
     improvements, and so on, all the way through."
 7
              Mr. Rogers, my question is: Were you asked that
     question, and did you give that answer in your deposition?
 8
 9
              MR. ANDRE: Your Honor, this is Mr. Andre.
10
     Objection. This is not impeachment. It's a completely
11
     different question that he's asked here at trial.
12
              MR. MacBRIDE: No, it's not, Your Honor. Excuse me.
              THE COURT: I think he's answered -- I mean, did you
13
14
     say that, Mr. Rogers?
15
              THE WITNESS: Did I say what's in the transcript?
16
              THE COURT: Yes.
17
              THE WITNESS: Sure.
18
              THE COURT: Okay. He's answered the question.
19
              THE WITNESS: I don't think what's in the transcript
20
     is what he's asking me, though.
              THE COURT: Well, you're entitled to explain your
2.1
2.2
     answer.
2.3
              THE WITNESS: I'm happy to. So --
24
              THE COURT: Well, you don't -- I mean, I think you
25
     just did.
```

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-Rogers, S. - Cross-
              THE WITNESS: Okay. All right.
 1
 2
              THE COURT: As I said, I'm the jury, so the Court
 3
     will decide the extent to which, if any, the prior testimony
 4
     is inconsistent with the testimony today.
 5
              MR. MacBRIDE: Thank you, Your Honor. May I
 6
     proceed?
 7
              THE COURT: Yes.
 8
              MR. MacBRIDE: Thank you.
 9
     BY MR. MacBRIDE:
10
     Q. Mr. Rogers, is it your understanding as a technologist --
11
     would you agree that Centripetal's first three patents were
12
     the ones that's enabled your company to get this speed
13
     breakthrough we've been discussing?
14
              They enabled us to start on that path, but they were
15
     not all that we needed to bring it to market as a product
16
     that worked.
17
              So you're probably a little confused about how
18
     technology works, I'm sensing, but it takes lots of pieces,
19
     and the first piece that works in a lab doesn't necessarily
20
     mean that it's all ready to be in a product. So we're a
2.1
     service.
22
     Q. Mr. Rogers, let's go back to your deposition, to
23
     Page 101, at line 2, lines 2 to 18.
24
              Mr. Rogers, I'll read this portion from the
25
     transcript:
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-Rogers, S. - Cross-
         "QUESTION: I'm not asking you, Mr. Rogers, whether
elements of your patents are used in your APF. I'm talking
about achieving the five million indicators of compromise and
being able to apply that at the full line rate without any
latency."
         Your lawyer objected. The question continues:
         "And so with respect to that ability, do you have
any understanding as to which of your patents are directed to
the core packet filtering techniques that allow you to
achieve that level?"
         Mr. Andre objects.
                   Speaking of the technology, the first
three enabled us to get the speed breakthrough.
                                                 There was a
lot more that had to be added, but that got us there."
         Mr. Rogers, were you asked this question, and did
you give this response in your deposition?
A. Yes, I was asked this question, and I gave this response.
         Are you saying that I have to have memorized my
previous testimony? Because I don't think there's anything
inconsistent in my answers to you and this testimony.
There's nothing inconsistent. So what are you saying?
         THE COURT: Well, that's for the Court to decide,
Mr. Rogers.
         THE WITNESS: Oh, I'm sorry.
         THE COURT: I mean, you can explain your answer, but
```

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-Rogers, S. - Cross-
     just saying that it's not inconsistent is not an explanation,
 1
 2
     that's an argument.
 3
              THE WITNESS: Okay. I would like to explain my
 4
     answer, then.
 5
              THE COURT: All right. You can explain it.
 6
              THE WITNESS: Okay. So we had to get over a hurdle
 7
     of basic speed. The first three patents did enable us to get
 8
     over that hurdle. The other patents were not directed at
 9
     high speed. They just had to be implemented in such a way
10
     that they could be high speed and that they wouldn't slow
11
     down the rest of the system. I think that's totally
12
     consistent. I think so.
1.3
              THE COURT: All right. You may proceed,
14
     Mr. MacBride.
15
              MR. MacBRIDE: Thank you, Your Honor.
16
     BY MR. MacBRIDE:
17
     Q. Mr. Rogers, the first three patents that we've just
18
     discussed, those are not asserted against Cisco in this case,
19
     correct?
20
     A. I don't know.
21
        Do you remember testifying previously in your deposition
22
     that these three patents, your first three, are not ones that
2.3
     Cisco is accused with?
24
              THE COURT: Not ones that what?
25
              MR. MacBRIDE: Your Honor, I'm happy to ask the
```

- 1 | question again, if you didn't hear it.
- THE COURT: I didn't hear the end of it.
- 3 MR. MacBRIDE: Yes. I'll keep my voice up, Your
- 4 Honor.
- 5 My question to Mr. Rogers was whether he agreed that
- 6 his first three patents, the ones we've been discussing, that
- 7 those three patents have not been asserted in this case
- 8 | against Cisco.
- 9 THE WITNESS: I believe they are not, to the best of
- 10 my recollection.
- 11 BY MR. MacBRIDE:
- 12 Q. Isn't it right, Mr. Rogers, that your company acquired
- 13 | the first of those three patents from a company called Great
- 14 | Wall?
- 15 A. That's incorrect.
- 16 Q. Well, let me ask it this way: Isn't it correct that the
- 17 | three patents, the first three patents, were acquired or
- 18 | licensed from a company called Great Wall and Wake Forest
- 19 University? That's where those three patents came from?
- 20 A. Yes. That was two separate transactions.
- 21 Q. Switching gears just a bit, Mr. Rogers, you founded
- 22 | Centripetal in 2009, right?
- 23 A. Yes.
- 24 Q. And your company sold your first RuleGATE product in
- December of 2014 or thereabouts; is that right?

- 1 | A. That's correct.
- 2 | Q. And before that first sale for RuleGATE was in
- 3 development, isn't it true that you, sir, visited the Cisco
- 4 | website to look at what Cisco was doing in the security
- 5 space?
- 6 A. I honestly don't recall, but it's not impossible.
- 7 Q. So you agree that you probably visited the Cisco website
- 8 during this time?
- 9 A. Probably.
- 10 Q. And, Mr. Rogers, I assume you have no reservation about
- 11 | going to Cisco's public website, correct?
- 12 A. It's public information, so...
- 13 Q. Right. You wouldn't expect a company, Cisco or any
- 14 | company, to put confidential information on their public
- 15 | website, true?
- 16 A. That's correct.
- 17 Q. And Centripetal doesn't put confidential information on
- 18 | its website, correct?
- 19 A. That's correct.
- 20 Q. And during RuleGATE's development during this 2009 to
- 21 | 2014 period, you did not regard Cisco as a competitor, true?
- 22 A. Say that again. Ask that question again.
- 23 Q. At the time that RuleGATE was under development leading
- 24 up to 2014, you did not regard Cisco as a competitor,
- 25 correct?

- 1 A. That's correct.
- 2 Q. And that's because Cisco was not in Centripetal's area of
- 3 | expertise, correct?
- 4 A. Well, I don't know what Cisco was doing. Were they in --
- 5 | I mean, that's a very vague question.
- 6 Q. Do you remember testifying in your deposition that you
- 7 | did not think Cisco was a competitor because they didn't
- 8 | share your company's area of expertise?
- 9 A. I could have said that, yes.
- 10 THE COURT: Let's always use the question and answer
- 11 and not -- but he's already answered the question, so we'll
- 12 move on.
- MR. MacBRIDE: Very good, Your Honor. We'll switch
- 14 gears again.
- 15 BY MR. MacBRIDE:
- 16 Q. Mr. Rogers, you've heard of a company called Threat Grid,
- 17 | correct?
- 18 A. Yes.
- 19 Q. And Centripetal purchased a subscription to Threat Grid's
- 20 | threat intelligence information, correct?
- 21 A. No, I don't think that's correct.
- 22 | Q. You don't remember testifying that you purchased their
- 23 feed?
- 24 | A. I think, as it turns out, I didn't -- we didn't purchase
- 25 | their feed. So I might have thought that we did, but we

```
-Rogers, S. - Cross-
     didn't.
 1
 2
     Q. Do you remember testifying in your deposition under oath
 3
     that you --
              THE COURT: We're not going to do it that way,
 4
 5
     Mr. MacBride. You're going to have to read the question and
 6
     the answer. I tried to get that message over a minute ago.
 7
              MR. MacBRIDE: Thank you, Your Honor.
     BY MR. MacBRIDE:
 8
 9
     Q. Mr. Rogers, if we could go back to Page 114 of your
10
     deposition, and we're at line 14 to 21.
11
              Mr. Rogers, I'm going to read this into the record:
12
              "QUESTION: What was the nature of the relationship
13
     between Threat Grid and Centripetal?"
14
              Mr. Andre objects.
15
              "ANSWER: What was the nature?
16
              "QUESTION: What was the nature of the relationship?
17
              "ANSWER: We purchased their feed. We utilized
18
     their feed. It's a subscription of some kind."
19
              Did you give that answer, sir?
20
     A. Yes, I did.
        And so as part of this subscription, your company would
2.1
22
     have sent -- excuse me.
2.3
              As part of this subscription, Threat Grid would have
24
     sent its threat intelligence to Centripetal, correct?
25
     A. So let me explain my previous comment.
```

So I thought we had purchased it -- I did not handle that part of it -- but what happened was we had a partnership with Threat Grid, where they had customers that might like to protect themselves using our system, and we would use their Threat Grid data feed, and then Threat Grid could gain a customer by selling their Threat Grid data feed directly to that customer. And I think that happened several times.

So that explains what was going on there. We actually didn't license from Threat Grid.

10 Q. So were you --

1

2

3

4

5

6

7

8

- 11 A. That's my explanation.
- 12 Q. Excuse me for interrupting.
- 13 Mr. Rogers, just to make sure I'm clear on your
 14 testimony today, are you saying that Threat Grid did not send
 15 its threat intelligence to your company?
- 16 A. We did receive Threat Grid intelligence at our company,
- 17 | as far as I remember.
- 18 Q. But your company didn't, in turn, send any of its
- 19 confidential information to Threat Grid, correct?
- 20 A. No, we did not --
- 21 Q. And you're aware that --
- 22 A. -- as far as I'm aware.
- 23 Q. Excuse me.
- And you're aware that Threat Grid is now part of Cisco; is that right?

- 1 A. Yes.
- 2 Q. Let's talk about another company, Mr. Rogers. Are you
- 3 | familiar with a company called Sourcefire?
- 4 A. Yes.
- 5 Q. And Sourcefire existed before Centripetal; is that right?
- 6 A. That's correct.
- 7 Q. And Sourcefire produced a product called intrusion
- 8 detection system. Is that right?
- 9 A. That's right.
- 10 Q. And Sourcefire's system was widely known in the industry
- 11 at the time, applying packet filtering rules, going back to
- 12 | the early 2000s; is that right?
- 13 MR. ANDRE: Objection, Your Honor; lack of
- 14 | foundation.
- 15 THE COURT: Overruled.
- 16 BY MR. MacBRIDE:
- 17 Q. Mr. Rogers, I can ask it again, if you need to be
- 18 reminded of the question.
- 19 A. What was the question, again?
- 20 Q. Sure. Do you agree that the Sourcefire system was widely
- 21 known in the industry as applying packet filtering rules,
- 22 | going back to the 2000s?
- 23 A. No.
- Q. Do you agree that Sourcefire's intrusion detection system
- 25 | is what's known as an inline system?

- 1 A. I don't know what you mean by that.
- 2 | Q. Are you familiar with the term "inline," Mr. Rogers?
- 3 A. Yes, I am, but I don't know what you mean by that.
- 4 Q. Let me try again.
- 5 Are you aware that Sourcefire's intrusion detection
- 6 system, also known as IDS -- are you aware that that product
- 7 of Sourcefire was what is known as an inline system?
- 8 A. Explain to me what you mean by "inline." "Inline" can
- 9 have many different meanings. So I can't answer your
- 10 question until you define your terms.
- 11 Q. So you're not familiar with concepts of inline and out of
- 12 bounds?
- 13 A. I think you're not familiar with those terms, so please
- 14 explain.
- 15 Q. I'll move on.
- Mr. Rogers, do you agree with me that Centripetal
- 17 | did not invent Sourcefire's intrusion detection system?
- 18 A. That's correct.
- 19 Q. And in 2012, isn't it true that you thought that
- 20 | Sourcefire's intrusion detection system was completely
- 21 | different than Centripetal's products?
- 22 A. That, I don't know the answer to. I think so, yes.
- 23 Q. Do you remember saying at your deposition that they were
- 24 | completely different products back in 2012?
- 25 THE COURT: Where did he say it?

```
-Rogers, S. - Cross-
              MR. MacBRIDE: Your Honor, we can turn to
 1
 2
     Mr. Rogers's deposition at Page 235, lines 2 through 14.
 3
     BY MR. MacBRIDE:
     Q. And that section is now displayed on the screen,
 4
 5
     Mr. Rogers. I'll read this for the record:
 6
              "OUESTION:" --
 7
              THE COURT: What page are we on here?
 8
              MR. MacBRIDE: I apologize, Your Honor. We're at
     Page 235 of Mr. Rogers' December deposition, Page 235,
 9
10
     line 2, toward the top of that page.
11
              THE COURT: Okay.
12
     BY MR. MacBRIDE:
1.3
     Q. Mr. Rogers, "QUESTION: If I understand your testimony
14
     correctly, in 2012 you viewed the Centripetal product to be
15
     superior to the Sourcefire intrusion detection system."
16
              Mr. Andre objects.
17
                       In 2012 we thought they were completely
              "ANSWER:
18
     different products for different purposes. The only thing
19
     that caught my eye was that Sourcefire was saying, oh, we
20
     stop 97 percent of attacks, which we did not believe at all.
2.1
     I think that's been proven not to be true. If it were true,
22
     we wouldn't have the cyber security problems we have today."
2.3
              Mr. Rogers, were you asked that question, and did
24
     you give that answer?
25
     Α.
         Yes.
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-Rogers, S. - Cross-MR. ANDRE: Objection, Your Honor. The previous question is about the intrusion detection system, and this is about the intrusion prevention system, two completely different technologies. THE WITNESS: That's true. THE COURT: Well, I'm lost on that. I didn't pick up that distinction. MR. ANDRE: Yes. Your Honor, Mr. MacBride was talking about Sourcefire's intrusion detection system, and this was a question about Sourcefire's intrusion prevention system, and they are two different technologies. MR. MacBRIDE: I'm happy to reask the question. BY MR. MacBRIDE: Q. Mr. Rogers, in 2012 is it true that you thought Sourcefire's intrusion prevention system was completely different than your products? That's a different question than you referred to in the last question. THE COURT: Well, answer the one on the floor. THE WITNESS: Yes, sir. So, please, ask me that question again. BY MR. MacBRIDE: Q. Certainly. My question is: In 2012 isn't it true that you thought that Sourcefire's intrusion prevention system was

completely different than Centripetal's products and served

- 1 | completely different purposes?
- 2 A. Yes.
- 3 Q. Mr. Rogers, a couple questions about Centripetal's
- 4 investors. You spoke about this with Mr. Andre.
- 5 You're familiar with a financial institution called
- 6 Oppenheimer, correct?
- 7 A. Yes.
- 8 Q. And your company retained Oppenheimer in 2015 or '16,
- 9 correct?
- 10 A. I believe so.
- 11 Q. And you asked Oppenheimer to find sources of capital for
- 12 | your company, true?
- 13 A. Yes.
- 14 Q. Oppenheimer then reached out to about 148 companies on
- 15 | your behalf to seek capital; is that right?
- 16 A. No, I don't think so.
- 17 Q. Well, you're aware that Cisco was one of the companies,
- 18 one of the many companies, that Oppenheimer reached out to on
- 19 your behalf, correct?
- 20 A. No, you say "many." I didn't say "many."
- 21 Q. Are you aware that Oppenheimer reached out to a number of
- 22 | companies?
- 23 A. Yes, it was more than one.
- 24 Q. Was it more than ten?
- 25 A. I don't know. I'm not sure.

- 1 Q. Could have been more than ten, true?
- 2 A. It could have been, of course.
- 3 Q. And are you aware that in response to Oppenheimer's
- 4 | outreach to Cisco for funding, Cisco declined to provide any
- 5 | funding to your company?
- 6 A. Yes.
- 7 Q. And do you agree that of all the companies that
- 8 Oppenheimer reached out to, only one made an offer to your
- 9 company?
- 10 A. I believe that's correct.
- 11 Q. And that company --
- 12 A. I didn't manage that, so you should ask Jonathan that
- 13 question. He was dealing with the day-to-day on that.
- 14 Q. Do you recall that the one company was named Fortress?
- 15 A. I remember Fortress, yes.
- 16 Q. And you agree that the offer from the -- the sole offer
- 17 | from Fortress was for debt funding; is that right?
- 18 | A. The details of it are complex, so you should ask
- 19 | Jonathan. I think there were elements of debt, but there
- 20 might have been some other elements of equity, as well, so
- 21 you should ask him.
- 22 Q. You agree, Mr. Rogers, that Fortress ultimately did not
- 23 | end up funding Centripetal, right?
- 24 A. No, we did receive a term sheet from them, but we did
- 25 | not -- we decided to go in a different direction.

- 1 | Q. You didn't close, right?
- 2 A. We did not close, no. We didn't -- we decided we didn't
- 3 | want to close.
- 4 Q. Now, Mr. Rogers, on direct exam Mr. Andre asked you about
- 5 | Plaintiff's Exhibit -- excuse me. I'll get to that in a
- 6 minute.
- 7 You testified to Mr. Andre a few minutes ago that
- 8 | you participated in this February 16 Webex meeting between
- 9 Centripetal and Cisco. Do you remember that testimony?
- 10 A. What testimony was that?
- 11 Q. Do you remember the questions Mr. Andre asked you about a
- 12 | February '16 -- February 2016 meeting between Centripetal and
- 13 | Cisco, a Webex meeting?
- 14 A. I remember he asked about it, yes.
- 15 Q. And do you remember you told him that you were certain
- 16 | that Centripetal talked about its patents at that meeting?
- 17 A. Yes.
- 18 | Q. I think your words were, "Of course we did."
- 19 A. Yes.
- 20 Q. Mr. Rogers, if we could turn to your deposition, to
- 21 | Page 178, lines 6 through 21 -- Page 178 of your December
- 22 deposition, lines 6 through 21.
- I'll read this exchange for the record.
- 24 THE COURT: I can read it.
- THE WITNESS: Okay.

```
-Rogers, S. - Cross-
 1
              (There was a pause in the proceedings.)
 2
              THE COURT: Okay.
 3
              MR. MacBRIDE: Your Honor, may I confirm with the
 4
     witness that he was asked these questions, or I can move on?
              THE COURT: No, I mean, you can ask him if you asked
 6
     him those questions and he gave you those answers, if you
 7
     wish.
     BY MR. MacBRIDE:
 8
     Q. Were you asked these questions, and did you give these
 9
10
     answers?
11
     A. Yes.
12
     Q. Mr. Rogers, you also testified on direct about a
13
     presentation that was used at that meeting. It's Plaintiff's
14
     Exhibit 547. It's been introduced into evidence.
15
              And Mr. Andre asked you some questions about this
16
     presentation. I believe he asked you about Page 6 and
     Page 7, and you provided some testimony about what was
17
18
     discussed.
19
              Isn't it true, sir, that you're not positive whether
20
     this document was even used in that Cisco presentation?
21
     A. What do you mean I'm not positive? It looks like it. I
22
     don't have a perfect memory, but to the best of my knowledge,
2.3
     it is the document.
24
     Q. Well, let's -- I just want to understand. Are you
25
     positive, or are you not sure?
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```
-Rogers, S. - Redirect-
         To the limits of my memory, I'm positive.
 1
    Α.
 2
         Do you remember testifying differently before?
 3
     Α.
         No.
         If we could go to Page 176 of your deposition, at
 4
 5
     lines 16 to 23.
 6
              MR. MacBRIDE: Your Honor, I can read it, or I'm not
 7
     sure if the Court is just reading it to yourself. I'm happy
 8
     to proceed however you would like.
 9
              THE COURT: All right. Did you give those answers
10
     to the questions?
11
              THE WITNESS: Are you asking me?
12
              THE COURT: Yes.
1.3
              THE WITNESS: Yes.
14
              THE COURT: Okay.
15
              MR. MacBRIDE: Mr. Rogers, thank you very much for
16
     your time.
17
              Nothing further, Your Honor.
18
              THE COURT: Any redirect?
19
              MR. ANDRE: Just one question. This is Paul Andre.
20
                         REDIRECT EXAMINATION
2.1
     BY MR. ANDRE:
22
         Mr. Rogers, could you explain to the Court the concept
2.3
     you were talking about earlier regarding the speed that the
24
     RuleGATE, or your product, handles and how that relates to
     the patents, the Centripetal patents, that are in this case?
25
```

-Rogers, S. - Redirect-

A. Sure. So the ability to be able to filter at high speed is not the only thing. There are other capabilities that are required. We have to be able to correlate so that we can identify who inside the network is talking to the remote bad guy.

Because if you don't know that, then the defending team can't do anything about it. They don't know what computer is infected. We have to be able to handle exfiltrations at the same time you have infiltrations. We have to be able to swap the policies rapidly with new updates to the threat intelligence, all these things.

And so these things, while they're not specific to the filtering capability, they all have to run at speed.

That's why I said that they would all have to be fast to be able to be effective as the filtering is effective.

Does that answer your question?

Q. It does. Thank you.

2.1

2.3

MR. ANDRE: I have no further questions, Your Honor.

THE COURT: All right. I think there's something in the rules that counsel agreed upon -- there was some discussion about recalling witnesses.

Is there any reason why either side would want to recall Mr. Rogers?

MR. ANDRE: Your Honor, Centripetal does not intend to call Mr. Rogers and will excuse him at this time.

```
-Rogers, S. - Redirect-
              THE COURT: How about the defendant?
 1
 2
              MR. MacBRIDE: No, Your Honor, no further need for
 3
     Mr. Rogers' time.
                        Thank you.
 4
              THE COURT: All right. Mr. Rogers, you are excused
 5
     as a witness. Of course, I'm not sure if you were designated
 6
     the corporate representative or if your son was, but...
 7
              THE WITNESS: Your Honor, it was my son who was
 8
     designated.
 9
              THE COURT: Well, if you're not going to be recalled
10
     as a witness, then it would be just like if we were all in
11
     the courtroom. You can observe the proceedings by video, if
12
     you choose to do so, but you cannot discuss your testimony
13
     with other witnesses.
14
              Do you understand what I mean by that?
15
              THE WITNESS: Yes, sir.
16
              THE COURT: Okay.
17
              (Witness excused.)
18
              THE COURT: Mr. Andre, have you got your next
19
     witness?
20
              MR. ANDRE: I do, Your Honor. We have Dr. Sean
21
     Moore, the Chief Technology Officer of Centripetal.
                                                          I don't
22
     know if he's in the waiting room or not. Hopefully, he is.
2.3
     Actually, he may be with -- hang on a second. They're
24
     putting him on right now.
25
              THE COURT: Okay. His name shows up as Jonathan
```

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-Moore, S. - Direct-
     Rogers on the display, but it's --
 1
 2
              MR. ANDRE: There it is. They changed the name.
 3
              THE COURT: All right. I have it.
 4
              THE CLERK: Dr. Moore, raise your right hand,
 5
     please.
 6
              (Witness sworn.)
 7
              MR. GAUDET: Your Honor, before we begin with the
 8
     examination -- this is Matt Gaudet, on behalf of Cisco. I
 9
     will be doing the cross-examination of Dr. Moore, just so you
10
     know we've changed on the Cisco side.
11
              THE COURT: All right.
12
              MR. ANDRE: May I proceed, Your Honor?
              THE COURT: You may.
13
14
              MR. ANDRE: Thank you.
15
              SEAN MOORE, Ph.D., called by the Plaintiff, having
16
     been first duly sworn, was examined and testified as follows:
17
                           DIRECT EXAMINATION
18
    BY MR. ANDRE:
19
         Good afternoon, Dr. Moore.
20
        Good afternoon.
     Α.
2.1
         Where do you currently work?
22
     Α.
         I work at Centripetal Networks.
2.3
     Q.
         And what is your position at Centripetal?
24
         I'm the Chief Technology Officer, and I'm also the Vice
25
     President of Research.
```

- 1 Q. What is your responsibility as the Chief Technology
- 2 Officer and the Vice President of Research?
- 3 A. Well, generally, it's to create, research, and develop
- 4 | new technologies for protecting networks against cyber
- 5 attacks.
- 6 Q. Before we start talking about Centripetal, let's get into
- 7 | your background a little bit.
- 8 Could you describe for the Court your education?
- 9 A. Sure. As shown on the slide here, in 1983, I received a
- 10 | Bachelor's degree in electrical engineering from Tulane
- 11 University.
- In 1990, I received a Master's degree in mathematics
- 13 | from the University of New Orleans.
- And in 1993 and '94, I received a Master's and Ph.D.
- degree in computer science from Dartmouth College.
- 16 Q. And your jobs are listed below that. Can you tell us
- 17 | what you did for BBN Technologies, and what kind of company
- 18 is that?
- 19 A. Sure. So BBN Technologies is a -- I describe them as an
- 20 R&D research services contractor for the government and for
- 21 the Department of Defense.
- 22 Just to make something concrete about that, so BBN,
- 23 | in conjunction with DARPA, actually invented the Internet and
- 24 | the base TCP/IP protocols back in the late '60s and early
- 25 '70s.

-Moore, S. - Direct-Q. And what was your job title there? What kind of work did 1 2 you do for them? 3 A. So I was the lead scientist. I was also the Director of 4 the Advanced Systems Department, and I was also a business 5 development director for the entire company. 6 THE COURT: Did you say -- what did you say BBN 7 invented? THE WITNESS: BBN invented the Internet, in 8 9 conjunction with DARPA, which is the Department of Defense 10 Advanced Research Projects Agency. Now, that happened before 11 I showed up there. That was in the late 1960s and early 12 1970s. 13 THE COURT: Well, there appear to have been 14 competing claims as to who invented the Internet, but you 15 believe that BBN did. 16 MR. ANDRE: Did Vice President Gore work at BBN? 17 MR. GAUDET: I was going to object that he was 18 impersonating the Vice President. 19 THE WITNESS: Okay. I want to be clear. Although I 20 worked at BBN Technologies, I did not invent the Internet. 2.1 THE COURT: All right. 22 THE WITNESS: I'm just trying to characterize the 23

THE WITNESS: I'm just trying to characterize the type of work that they did and the type of environment that was BBN. It was very creative, especially in the area of network technologies.

24

- 1 THE COURT: All right. You may proceed.
- 2 MR. ANDRE: Thank you, Your Honor.
- 3 BY MR. ANDRE:
- 4 | Q. When you left BBN Technologies, what is Cetacean, and
- 5 | what did you do there?
- 6 A. Cetacean Networks was a start-up company that was
- 7 developing internet routers that were designed to optimally
- 8 | transport voice over IP, or telephone calls, and video
- 9 conferences over the Internet. And that was around the 2000
- 10 | time frame, so that was quite disruptive, advanced technology
- 11 | for the time, and I was the chief scientist at Cetacean
- 12 Networks.
- 13 Q. We noticed Mr. Steven Rogers, who was testifying before
- 14 you, had Cetacean on his background, as well.
- 15 Did you guys work together?
- 16 A. Yes. So Steven was the CEO and founder of Cetacean. He
- 17 | hired me in 2001.
- 18 Yeah, we did work together. We were a great team.
- 19 You know, Steven has great visionary ideas, and, you know, I
- 20 like to think that I have the ability to design -- do the
- 21 math and the computer science and the algorithms to carry out
- 22 those ideas.
- 23 Q. After Cetacean, I see you went to Avaya. How did you get
- 24 to Avaya?
- 25 | A. So Avaya acquired Cetacean Networks. Avaya is -- or at

- 1 | the time was the world's leading enterprise
- 2 | telecommunications manufacturer, and I was brought in as the
- 3 chief architect and chief scientist.
- 4 Q. After that, you went to Centripetal Networks?
- 5 A. Yes.
- 6 Q. And let's talk about Centripetal. How long have you been
- 7 working at Centripetal?
- 8 A. I started there in April 2010, so just over ten years.
- 9 | Q. And how many employees did Centripetal have when you
- 10 started?
- 11 A. I was the third employee. Steven Rogers, the founder and
- 12 | CEO, was there, as well as Neel Price, the Vice President of
- 13 | Sales.
- 14 Q. And what made you want to join Centripetal?
- 15 A. Well, there are several factors. So I had been at Avaya
- 16 | for several years and -- how would I put it?
- I really just felt like I needed to take my shot at
- 18 | changing the world, and that wasn't going to happen at Avaya.
- 19 I knew Steven. You know, I worked with Steven ten years
- 20 before, and I knew Steven had a new company going, wanted to
- 21 do some exciting stuff.
- 22 So I contacted Steven. We stayed in touch over the
- 23 | years, but I contacted him. We talked about what he wanted
- 24 | to do. He wanted to solve the Internet cyber security
- 25 | problem once and for all, and that was something I wanted to

```
-Moore, S. - Direct-
     do, too. And I knew, you know, if anybody, Steven and I
 1
 2
     could pull this off, so I decided to leave Avaya and join up
 3
     with Centripetal.
     Q. What was the vision of the company at the time you joined
 4
 5
     Centripetal?
 6
        Well, the vision was big. As I just said a moment ago,
 7
     we wanted to take our shot at solving the Internet cyber
 8
     security problems once and for all.
 9
        Let me show you what's been marked as PTX-1219.
10
     Α.
        Okay.
11
        And you may not be able to see here, but if you go to the
12
     second page, could you describe what this document is?
13
        Well, this appears to be one of the web pages on our --
14
     on the Centripetal website. I don't know if it's current,
15
     but it's, you know, the "About Centripetal" page.
16
              MR. ANDRE: Your Honor, we'd like to move
17
     Exhibit PTX-1219 into evidence.
18
              MR. GAUDET: No objection.
19
              THE COURT: That exhibit will be admitted.
20
              (Plaintiff's Exhibit PTX-1219 received in evidence.)
21
     BY MR. ANDRE:
22
        If you go to the second page of this document, in the
```

Q. If you go to the second page of this document, in the first full paragraph -- can we pull that up? The page before that. I'm sorry. There you go. It says, "The problem we solve."

23

24

There's a sentence that states, "By distributing and applying cyber threat intelligence, it should be possible to actively prevent most cyber attacks." Do you see that?

A. Yes, I do.

Q. What do you mean by that?

A. Well, so I said earlier, and I think it says in the first sentence on the page, cyber security — we wanted to solve the Internet cyber security problem once and for all. We knew we needed to use a completely different approach than what had been done before, and we were aware that there was what is called cyber threat intelligence. And what that is is it's intelligence, data reports, about cyber criminals on the Internet and which computers do they control, who are the cyber criminals, and what types of attacks are they launching from the computers that they control.

So that's what cyber intelligence is. Our idea was, well, why don't we take the cyber threat intelligence, which is interesting by itself, but let's somehow transform this so that we can apply it to live internet traffic and see if we can secure the Internet this way, by essentially shutting down the cyber criminal communications and their attacks.

THE COURT: We don't know -- I don't see any date on this document. It's from the plaintiff's website. I don't know if there's any way we can determine the date. I don't see a date on the document.

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-Moore, S. - Direct-
              MR. ANDRE: Your Honor, at the very last page -- or,
 1
 2
     I guess, the third page there's a 2017 date.
 3
              But is there another date on this?
 4
              (There was a pause in the proceedings.)
              MR. ANDRE: There appears to be a 2018 date on it.
 6
              THE COURT: Where is that?
 7
              MR. ANDRE: Is it the last page?
 8
              Yeah, there's a copyright on the very last page,
 9
     Your Honor, 2018.
10
              THE COURT: Oh, okay. 2018. All right.
11
              You may continue.
12
              MR. ANDRE: Thank you, Your Honor.
13
     BY MR. ANDRE:
14
     Q. So have you ever heard of the term "operationalizing
15
     cyber threat intelligence"?
16
        Yes.
     Α.
17
        What does that mean?
     0.
18
        Well, first, let me say I believe we coined the term
19
     "operationalized threat intelligence," and we invented
20
     operational cyber threat intelligence technology, and I'll
2.1
     probably refer to it as operationalized CTI, just because the
22
     whole sentence is a mouthful.
2.3
              So what is operationalized CTI? As I said earlier,
24
     we were discussing cyber threat intelligence, and we'd get --
25
     we'll get cyber threat intelligence from CTI providers, and
```

we call this raw cyber threat intelligence. And, as I said earlier, you know, by itself, this raw CTI is good stuff; it tells us about cyber criminals, what they're doing, where they are. Great, but we can't take it in that raw form and apply it to live internet traffic to defend networks.

So what we do is we go through this transformation process where we take the raw cyber threat intelligence, and we call it operationalizing cyber threat intelligence. We're transforming it into computer logic and algorithms that we can then apply directly to the live internet traffic to stop cyber attacks as they're occurring or before they even occur, before they cause any damage.

- Q. If we go to the next paragraph in PTX-1219, Pages 2 and 3, could you describe what you're discussing in that
- 15 paragraph?

1

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- 16 A. Okay. So, yeah, as I described it, it seems straightforward, you know, to take cyber threat intelligence, 17 18 operationalize it, and, therefore, stop cyber attacks. But 19 that step of transforming the raw CTI to operationalized CTI 20 is very difficult. We had to develop new mathematics, new computer science, new algorithms, and develop new 21 22 technologies that could apply this operationalized CTI to 2.3 live internet traffic. This is a very difficult thing to do,
 - Q. Did it take you a long time?

but we did it.

-Moore, S. - Direct-

A. Well, yes, and I like to say we're still doing it. And, you know, that has to do with how we're continually evolving, improving our products, and that's in response to -- you know, there's -- cyber attacks are always evolving and changing themselves, and they're growing rapidly, as is the associated cyber threat intelligence. It's also evolving right along with it.

Our internet infrastructure changes, so, you know, in 2010, Internet -- you know, let's just say 1- to 10-gigabits-per-second links were just coming into play, and now it's 100-gigabits-per-second links. So things are faster. We've got Clouds now, we've got other infrastructure changes, and we have to adapt our technology.

And I'll also say, you know, another major component of why we need to continually create new technologies is encryption. You know, back in 2010, when we started the company, you know, encryption was in use, but it was generally in use for legitimate traffic for financial transactions.

And then about that time frame, you know, cyber criminals started using encrypted traffic. And then by, I'd say, the 2015-2016 time frame, there was a big push to just encrypt everything on the Internet. And that's pretty much where we are today, but we have to continually evolve our products, our operationalized CTI technologies, to adapt to

- 1 encryption.
- 2 Q. Go to the next paragraph of this document, PTX-1219. You
- 3 | talk about how Centripetal intended to solve the problem that
- 4 | you were just discussing. Can you describe how, one,
- 5 RuleGATE was revolutionary new technology?
- 6 A. Sure. So RuleGATE is our platform upon which, you know,
- 7 | we build all our operationalized CTI technologies. It's
- 8 | revolutionary, if for any reason -- you know, operationalized
- 9 | CTI technologies did not exist before we invented them.
- 10 Nobody could take raw cyber threat intelligence and apply it
- 11 to live Internet traffic to stop cyber attacks.
- So the RuleGATE network appliance is the platform
- 13 upon which we build and deploy these operationalized CTI
- 14 technologies.
- 15 Q. Let me show you another document we've marked as PTX-957.
- 16 Dr. Moore, could you tell us what this document is?
- 17 | A. This is a white paper that I wrote in the 2013 time
- 18 | frame, I believe, on threat surface reduction.
- 19 Q. And what is a white paper?
- 20 A. Well, generally, in the technology industry, you'll write
- 21 | white papers to communicate new technology concepts and their
- 22 | benefits, but you'll do it in a way that you're not using,
- 23 like mathematics or, you know, implementation details of the
- 24 | technology. It's like a technology marketing document.
- 25 Q. And on the cover, at the bottom, there's a date of

April 30, 2015. Is that when you updated or published on the website?

- A. I don't really know what that date refers to.
- 4 Q. Okay. Fair enough.

I want to turn your attention to a figure in this white paper, figure 3 -- figure 1, on Page 3.

Could you describe for the Court what these round discs with red and black lines are and how that relates to reducing the threat -- the surface reduction?

A. Okay. Sure. So, again, the white paper is kind of a threat surface reduction, and this white paper was written to say, well, you know, we know we need something new to solve the Internet cyber security problem. We have a -- we've invented a new defense methodology that we call threat surface reduction. So these discs are a way of visualizing what that is, so let me try to describe it briefly.

So each of these discs — the center of the disc represents your computers, your networks, that you want to protect from cyber criminals, cyber threats. Now, the perimeter of these discs represent all the Internet computers that are out there. There's billions of computers, desktops, mobile phones, et cetera. And the radius of these discs represent communications between all the Internet computers and your computer, your network, at the center of the disc.

So what the disc on the left represents is what we

call the threat surface. Cyber criminal computers that can communicate with your computer at the center, that communication is represented by red lines. These are bad. Cyber criminal, red, bad. They're attacking or they can attack your computer. The white lines represent -- well, these are legitimate computers that can communicate with yours.

And so it's the idea of -- you know, so the disc on the left, the red lines, red you think of this is your threat surface, and what we want to do as a defense methodology is, well, let's eliminate those red lines. Let's, you know, block communications between cyber criminal computers and our computer networks at the middle of the disc.

So as we transition from left to right, let's say here, we're reducing the threat surface. We're turning those red lines into black, and once we have all the red lines turned to black, we totally reduce the threat surface of the Internet, and we are protected from cyber criminals, because they can't communicate -- their computers can't communicate with ours.

Q. Thank you.

MR. ANDRE: And, Your Honor, I'd like to move this document, PTX-957, into evidence.

MR. GAUDET: All right. Your Honor, we do have an objection. It's a foundation objection that I suspect

```
-Moore, S. - Direct-
    Mr. Andre will be able to clear up.
 1
 2
              It's that the witness testified that he thought he
     wrote this in 2013, or wrote a document in 2013, and this
 3
 4
     document indicates it was written on April 30, 2015, on the
 5
     bottom right of the first page. And so perhaps if Mr. Andre
 6
     just clarifies that, we would withdraw the objection.
 7
              THE COURT: Well, the witness said he didn't know
 8
     what that date meant. As long as that date is subsequent to
 9
     the date that he said he prepared it, I don't see that
10
     there's a problem. So I think the foundation is properly
11
     laid.
12
              But I do have a question, and that is in the
13
     diagram, you show all of these entrances from the outside to
14
     the computer to be blocked. I suppose -- well, I don't mean
15
     to say, "be blocked." They have security applied to them.
16
     So that's what it means. It doesn't mean that you're
17
     blocking all of these pathways, it means that you're applying
18
     your RuleGATE security to all of these lines, radius lines,
19
     inside the circle. Is that right?
20
              THE WITNESS: Yes.
21
              THE COURT: Okay.
22
              (Plaintiff's Exhibit PTX-957 received in evidence.)
2.3
     BY MR. ANDRE:
24
        Thank you, Dr. Moore.
25
              Now, you're an inventor on all the patents in this
```

- 1 | case, correct?
- 2 A. Yes.
- 3 Q. Are patents important to Centripetal?
- 4 A. Yes, they're very important.
- $5 \mid Q$. And why is that?
- 6 A. Well, you know, we've made tremendous investments --
- 7 | time, energy, money, promotional investments -- in this
- 8 | technology, and we want to protect ourselves from somebody
- 9 else copying or stealing the technologies.
- 10 Q. What's the process that you use at Centripetal to come up
- 11 | with these inventions and then go through the patent process?
- 12 A. Sure. Well, you know, this was this idea of
- 13 operationalizing cyber threat intelligence. It was a new
- 14 | idea, and so there's always new cyber attacks, new things we
- 15 | need to defend against, and so we're always coming up with
- 16 | new ideas and coming up with, you know, ideas about, well,
- 17 | how are we going to develop technologies that will do this?
- 18 | And once we figure that out, the ideas and how we might
- 19 realize them, then we file for patents.
- 20 And then subsequent to that, we develop the
- 21 | technologies and get them into our products.
- 22 Q. What were the kinds of problems that you were trying to
- 23 | solve with the technology described in these patents?
- 24 | A. You know, I'll just say generally it's, how do we, you
- 25 know, operationalize cyber threat intelligence to stop cyber

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—Moore, S. - Direct—
     attacks, in all their many forms, that are continually
 1
 2
     evolving all the time?
     Q. And the technology you describe in your patents, do you
 3
     put those into the Centripetal products?
     A. Yes.
 6
     Q. Let me show you what's been marked as JTX-1, the '205
 7
     patent.
 8
              MR. ANDRE: And, Your Honor, I would like to move
 9
     JTX-1 into evidence.
10
              MR. GAUDET: No objection.
11
              THE COURT: I'm sorry. What are you asking to
12
     introduce?
13
              MR. ANDRE: This is Joint Trial Exhibit Number 1,
14
     the '205 patent. I'd like to move it into evidence.
15
              MR. GAUDET: No objection, Your Honor.
16
              THE COURT: All right.
17
              (Joint Trial Exhibit JTX-1 received in evidence.)
18
              THE COURT: I have a question for Dr. Moore. The
19
     purpose, I think I understood you to say, for all of these
20
     patents, is to operationalize, which I assume you mean make a
2.1
     functioning part of your product --
2.2
              THE WITNESS: Yes.
2.3
              THE COURT: -- threat intelligence that you acquire.
24
              THE WITNESS: Yes.
25
              THE COURT: Does that mean that you acquire this
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Carol L. Naughton, Official Court Reporter

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-Moore, S. - Direct-
     threat intelligence from sources other than your own systems?
 1
 2
              THE WITNESS: Yes, it does. So --
 3
              THE COURT: Well, where do you get this threat
 4
     intelligence from?
 5
              THE WITNESS: Yes, Your Honor. So there's actually
 6
     a thriving ecosystem of companies that are generally called
 7
     CTI providers, cyber threat intelligence providers.
 8
     are independent organizations that go out, watch what's going
 9
     on on the Internet, watch what the cyber criminals are doing,
10
     and they create this cyber threat intelligence, they support;
11
     you know, who are the cyber criminals, what computers do they
12
     control, and what types of attacks are they doing? And they
13
     publish this information by subscription.
14
              So our organization, our products, we subscribe to
15
     the CTI from many of the CTI providers. I think we have
16
     business relationships with on the order of a hundred of
17
     these CTI providers. And they all provide different types of
18
     cyber threat intelligence, and so we get all of our cyber
19
     threat intelligence from these, you know, approximately
20
     hundred CTI provider organizations.
2.1
              THE COURT: Are they international in scope?
22
              THE WITNESS: Yes.
23
              THE COURT: Uh-huh. All right. You may proceed,
24
     Mr. Andre.
25
              MR. ANDRE: Thank you, Your Honor.
```

- 1 BY MR. ANDRE:
- 2 | Q. Dr. Moore, we're looking at the front page of the '205
- 3 | patent, and, first of all, are you an inventor of this
- 4 | patent?
- 5 A. Yes.
- 6 Q. Now, if I were to tell you -- ask you questions about
- 7 | interpreting the claims of these patents and giving me a
- 8 | legal interpretation, could you do so?
- 9 A. I cannot. I'm not a patent lawyer. I'm not qualified to
- 10 do that.
- 11 Q. If I asked you about the technology, about these patents,
- 12 | could you give me that answer?
- 13 A. Yes.
- 14 Q. All right. Let's talk about the technology, then, of the
- 15 '205 patent.
- 16 What problems were you trying to solve with the '205
- 17 | patent? And just describe generally what the patent is
- 18 | about, from a technology point of view.
- 19 A. Sure. I characterize this as our network protection
- 20 system technology that enforces these operationalized CTI
- 21 | policies on wide network traffic.
- 22 So it enforces CTI policies. These are dynamic
- 23 | security policies applied to live network traffic to stop
- 24 cyber attacks.
- 25 Q. And I'm going to show you a document we marked as

```
—Moore, S. - Direct-
     PTX-1112 and ask you have you seen this document?
 1
 2
     Α.
         Yes, I have.
 3
     Q. And what is this document?
              THE COURT: Where?
 4
 5
              MR. ANDRE: I'm sorry. This is PTX-1112, Your
 6
     Honor. 1112.
 7
              THE COURT: Okay, PTX-1112. Okay.
 8
              You may proceed.
 9
              MR. ANDRE: Thank you.
10
     BY MR. ANDRE:
11
       Dr. Moore, what is this document?
12
         Well, this document -- first, let me say this document
13
     was given to me by Steven Rogers shortly after I joined the
14
     company in April 2010, and what this is is a program
15
     description published by the Office of Naval Research,
16
     announcing that they've got a program scoped out for doing
17
     research, funded research, into solving the computer network
18
     defense problem.
19
              MR. ANDRE: Your Honor, I would like to move
20
     PTX-1112 into evidence.
2.1
              MR. GAUDET: No objection.
22
              THE COURT: That exhibit will be admitted.
2.3
              (Plaintiff's Exhibit PTX-1112 received in evidence.)
24
     BY MR. ANDRE:
25
     Q. If we go down to Section 6 of the document on the first
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-Moore, S. - Direct-

page, entitled "Research Opportunity Description," could you describe what the Office of Naval Research was looking for?

A. Yes. So call it the -- the title of the whole program is called "Computer Network Defense," and what the Office of Naval Research -- I'll refer to it as ONR -- says in the first sentence, they're looking for innovative research proposals for new technologies that support proactive cyber network defense.

So, you know, they're saying -- well, I think in later sections they talk about what problem they really need to solve, but they need to protect the Department of the Navy networks, and they're looking for people to research new technologies to do that.

Q. And how did this document influence your motivation to come up with the technology that was in the '205 patent?

A. Well, what got our attention right away was the wording in that first sentence that says, "We need proactive cyber network defense."

Now at this point we already thought of the idea of operationalizing cyber threat intelligence, and one reason we loved that idea was we felt it was the first way ever that could be used to proactively defend networks. So when Steven saw this program announcement and gave it to me, we keyed in on the wording -- "Oh, they're looking for proactive cyber network defense solutions. We think we know how to do that."

- Q. And what's the difference between proactive defense and reactive defense?
 - A. Okay. So reactive defense -- well, let me start with saying what's proactive defense.

2.3

Well, the basic idea of proactive defense is we need to be able to stop cyber attacks before they even occur, before they can cause any damage, which may sound like, how is that possible? Well, it is possible if you operationalize cyber threat intelligence.

Now, that's opposed to at the time the existing state-of-the-art were what were called reactive defenses, which is really not a defense at all. It's after-the-fact forensics on looking at historical data, trying to figure out if you were even attacked, and if you do look at historical data and say, oh, we think we got attacked at a certain time in the past, you react to that by coming up with possible defense measures in the future.

But it's reactive. It doesn't stop the attacks at all before they occur. The damage has already happened, and you're just reacting to an attack that already occurred in order to defend. What you want, of course, is proactive, which stops these attacks before they even occur, before they cause any damage, and that's what the ONR is looking for.

O. Go down to the next section, 6.1. It talks about the

background of this program.

And could you describe what the ONR, the Office of the Naval Research, was talking about with respect to the background upon which this program was based?

A. Sure. So, in a nutshell, what they're saying here is that cyber attacks are growing explosively. They have advanced technology capabilities now, and we need to be able to stop these attacks or mitigate them in real time, while still being able to operate our networks effectively.

And they're also saying that, unfortunately, current conventional network defense tools -- they're reactive, not proactive, and these just aren't going to work. So we're not going to invest more money in reactive solutions that don't work. We're going to invest money, research, into proactive solutions.

- Q. Let's go back to the first page of this document, and under the response date -- was this the state-of-the-art at about 2010, in the time frame of this paper or this proposal?
- 18 A. Yes.

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- 19 Q. Okay. If we go back to the second page of the document,
- 20 | the first full paragraph, where it says, "To enable
- 21 war-fighter posture," do you see that?
- 22 A. Yes.
- Q. Can you explain what the Office of Naval Research is requesting in this proposal?
- 25 A. Yes. So they're saying, look, we know that we need to

-Moore, S. - Direct-

change our posture from these reactive forensic, historical approaches to computer network defense, to completely pivot and go to a proactive approach to cyber defense, which means we need to, you know, stop the cyber attacks before they occur in real time, you know, on live network traffic.

I should also add they're not saying they know how this can be done. They're saying this is what we need. We don't know how to do it. We want -- we will pay people to research this problem and develop new technologies that are proactive, that are predictive.

MR. ANDRE: Your Honor, I'm about ready to go to another exhibit. I know it's 4:00. Do you want to adjourn until tomorrow morning?

THE COURT: Yes. I was wondering if this would be a good time. If you're moving on to another exhibit, I think this would be the right time for us to adjourn.

Dr. Moore, when we interrupt a witness's testimony in the middle of it, so to speak, the rule is that you should not consult anything or discuss anything with anyone that would add to the knowledge of your subject matter of your testimony.

In other words, you should take tonight off and return to testify tomorrow without adding any new knowledge of what your anticipated testimony is going to be.

THE WITNESS: I understand, Your Honor.

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THE COURT: All right. So we'll be adjourned for
today, and we'll try to resume at 10:00 Eastern Time. I
don't know where you're testifying from.
         Where are you? Where are you, geographically?
         THE WITNESS: Oh. I'm in Portsmouth, New Hampshire.
        THE COURT: I was wondering about the background.
        MR. GAUDET: Your Honor, I was wondering why that
boat is stalled. It's been there the whole time.
         THE COURT: Well, it's a tugboat. I guess it
doesn't have any business today. It must be on lockdown.
         THE WITNESS: The real time is just to my right
here. It looks pretty much like that, except the boats are
actually moving.
         THE COURT: Okay. Well, we'll be adjourned until
10:00 tomorrow morning --
        MR. GAUDET: Thank you, Your Honor.
         THE COURT: -- as far as the witness is concerned.
I'll ask counsel to stay on just a moment.
         Is there anything else that we need to take up
today, counsel?
        MR. ANDRE: Nothing from Centripetal, Your Honor.
We're good.
            Thank you.
        MR. GAUDET: And nothing from Cisco, Your Honor.
Thank you.
         THE COURT: Have you exchanged information as to who
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tomorrow's witnesses are expected to be?
 1
 2
              MR. ANDRE: Yes, Your Honor. Tomorrow we will --
 3
     after Dr. Moore is off the stand, we have a couple short
     deposition clips of Cisco witnesses we're going to play for
 4
 5
     Your Honor, and then Dr. Michael Mitzenmacher, one of
 6
     Centripetal's infringement experts, will be taking the stand
 7
     and talking about three of the patents.
 8
              THE COURT: All right. Okay. Anything further from
 9
     the defendants?
10
              MR. GAUDET: Nothing from Cisco, Your Honor. Thank
11
     you.
12
              THE COURT: All right. Well, then, we'll be
     adjourned until tomorrow morning at 10:00.
13
14
              (The proceedings recessed at 4:03 p.m.)
15
                             CERTIFICATION
16
17
          I certify that the foregoing is a correct transcript
18
     from the record of proceedings in the above-entitled matter.
19
20
21
                             /s/
                           Carol L. Naughton
22
2.3
                              May 7, 2020
24
25
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